October 16, 2006

CAROLINE DOLL CAL STATE UNIVERSITY CHANNEL **ISLANDS** ONE UNIVERSITY DRIVE CAMARILLO, CA 93012-8599

#### HYDRAULIC TEST RESULTS, Plant: OLD WELL

Location: 3101 CENTRAL AVE HP: 40 Cust. #: Serv. Acct. #: Meter: Pump Ref #:

Meter: Pump Ref #: 11674

In accordance with your request, a test was made on your turbine well pump on October 16, 2006. If you have any questions regarding the results which follow, please contact STEVE VILLEGAS at (805)654-7121.

# **EQUIPMENT**

Pump Mfg.: WORTH No.: VTP11028 Motor Mfg.: US No.: 3657257-2 Motor Mfg.: US

RESULTS	Test 1	Test 2	Test 3
Discharge Pressure, PSI	6.2	25.6	46.2
Standing Water Level, Feet	17.8	17.8	17.8
Drawdown, Feet	64.7	56.1	46.4
Discharge Head, Feet	14.3	59.1	106.7
Pumping Water Level, Feet	82.5	73.9	64.2
Total Head, Feet	96.8	133.0	170.9
Capacity, GPM	1,000.0	856.0	678.0
GPM per Foot Drawdown	15.5	15.3	14.6
Acre Feet Pumped in 24 Hours	4.420	3.784	2.997
kW Input to Motor	37.1	36.6	35.1
HP Input to Motor	49.8	49.1	47.1
Motor Load (%)	110.7	109.2	104.7
kWh per Acre Foot:	201	232	281
Overall Plant Efficiency (%)	49.1	58.6	62.2
Customer Meter, GPM	1,111.0		

The above test results indicate various operating conditions of this pump.

October 16, 2006

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ISLANDS
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CAMARILLO, CA 93012-8599

PUMPING COST ANALYSIS, Plant: OLD WELL

Location: 3101 CENTRAL AVE HP: 40 Cust. #: Serv. Acct. #:

Meter: Pump Ref #: 11674

The following analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during Edison pump test number 2 performed on October 16, 2006, billing history for the past 12 months, and your current rate of PA-1.

Assuming that water requirements will be the same as for the past year, and all operating conditions (annual hours of operation, head above, and water pumping level) will remain the same as they were at the time of the pump test, it is estimated that:

- 1. Overall Plant Efficiency can be improved from 58.6% to 65.0%.
- 2. This can save you up to 2,926 kWh and \$ 422.45 annually.

	Plant E	fficiency	
	Existing	<u>Improved</u>	Savings
Total kWh	29,604	26,678	2,926
kW Input	36.6	33.0	3.6
kWh per Acre Foot	232	209	23
Acre Feet per Year	127.5		
Average Cost per kWh	\$0.14		
Average Cost per Acre Foot	\$33.53	\$30.21	\$3.31
Overall Plant Efficiency (%)	58.6	65.0	
Total Annual Cost	\$4,274.52	\$3,852.07	\$422.45

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact STEVE VILLEGAS at (805)654-7121.

October 16, 2006

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#### HYDRAULIC TEST RESULTS, Plant: NEW WELL

Location: 3101 CENTRAL AVE HP: 200

Cust. #: Serv. Acct. #:

Meter: Pump Ref #: 32091

In accordance with your request, a test was made on your turbine well pump on October 16, 2006. If you have any questions regarding the results which follow, please contact STEVE VILLEGAS at (805)654-7121.

# **EQUIPMENT**

Pump Mfg.: N/A No.: NO PLATE Motor Mfg.: GE No.: 40024783

RESULTS	Test 1	Test 2	Test 3
Discharge Pressure, PSI	4.6	31.8	58.6
Standing Water Level, Feet	106.6	106.6	106.6
Drawdown, Feet	203.7	187.8	170.4
Discharge Head, Feet	10.6	73.5	135.4
Pumping Water Level, Feet	310.3	294.4	277.0
Total Head, Feet	320.9	367.9	412.4
Capacity, GPM	1,508.0	1,382.0	1,257.0
GPM per Foot Drawdown	7.4	7.4	7.4
Acre Feet Pumped in 24 Hours	6.665	6.108	5.556
kW Input to Motor	136.7	138.2	137.6
HP Input to Motor	183.3	185.3	184.5
Motor Load (%)	87.1	88.0	87.6
Measured Speed of Pump, RPM	1,788		
kWh per Acre Foot:	492	543	594
Overall Plant Efficiency (%)	66.7	69.3	70.9
Customer Meter, GPM	1,448.0		

The above test results indicate various operating conditions of this pump.

October 16, 2006

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ISLANDS
ONE UNIVERSITY DRIVE
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PUMPING COST ANALYSIS, Plant: NEW WELL

Location: 3101 CENTRAL AVE HP: 200 Cust. #: Serv. Acct. #:

Meter: Pump Ref #: 32091

The following analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during Edison pump test number 3 performed on October 16, 2006, billing history for the past 12 months, and your current rate of PA-1.

	<u>Existing</u>
Total kWh	259,680
kW Input	137.6
kWh per Acre Foot	594
Acre Feet per Year	436.8
Average Cost per kWh	\$0.14
Average Cost per Acre Foot	\$85.84
Overall Plant Efficiency (%)	70.9
Total Annual Cost	\$37,495.20

The hydraulic test results indicate that this pump is operating in an efficient manner.

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact STEVE VILLEGAS at (805)654-7121.